truncated and only slightly angularly bent in the middle, and the animal has a distinct white streak on each side of its neck, and the shields over the temples are flatter. The ridge of large tubercles on the under outer side of the hind legs are small and more equal; and the nose is longer, more conical, and produced. The under and outer sides of the hind legs with a series of large broad scales, the last, near the feet, being high and conical.

DESCRIPTION OF PLATE XLII.

- Fig. 1. Hydraspis gordoni (nat. size), from the animal living in the Zoological Society's Gardens.
 - Gular end of sternum (one-fourth of nat. size).
 Anal end of sternum (one-fourth of nat. size).
 - 5. Note on *Oculinaria*, a New Genus of social *Ascidia*. By Dr. J. E. Gray, F.R.S., V.P.Z.S., &c.

The British Museum lately received from Dr. Bowerbank some animals in spirits from Fremantle, West Australia. Among others there is a group of Ascidia that is very distinct from any that I have previously seen. It is very like a fragment of an old stem of Oculina virginea. I therefore propose to call it

OCULINARIA AUSTRALIS.

B.M.

The mass is cylindrical, about 8 inches long, and $1\frac{1}{3}$ inch in diameter in spirits. It is white, with ends rather tapering and rounded.



Oculinaria australis.

It entirely consists of a large number of more or less oblong cysts, placed closely side by side on every side of an imaginary central axis,

the cysts covering the ends of the mass like the rest of the body. The cysts are hard, cartilaginous, rather convex externally, with two concavities having an opening at the base of each. The apertures are slightly raised round the edge; and the centre is closed with four short valves, leaving a stellate 4-rayed aperture. The outer surface of the cyst is covered with a thick hard skin, strengthened externally with imbedded particles of sand, which are more abundant and clustered in certain parts, especially in those sunk below the general level of the surface. The animal is full of sand, in rhombs and crystals.

6. Note on *Theonella*, a New Genus of Coralloid Sponges from Formosa. By Dr. J. E. Gray, F.R.S., V.P.Z.S., &c.

Mr. Swinhoe sent to the British Museum in 1867, along with some other marine productions, a small specimen of coralloid sponge. The outline of the cup is irregular, and the base of the cavity imperfect, which induced me to consider that the species was imperfectly developed. Though I promised to describe it, I have waited in hopes that I might obtain a more perfect specimen; but Mr. Swinhoe has now left Formosa, and informs me that he is not likely to obtain any other specimen. The sponge in some external characters is like the genus *Macandrewia*, but it differs from that sponge in not having any stellate spicules, or at least Mr. Cooke, who has kindly examined the sponge for me, did not discover any. It is, I believe, the only sponge of the family in which they have not been discovered.

THEONELLA.

Sponge cup-shaped, thick, covered with a smooth rather coriaceous external coat; internally formed of netted spicules, arranged so as to leave an hexangular mass; the spicules subcylindrical, united at the inosculation of the network by a siliceous callosity; the body of the spicules generally smooth, but sometimes slightly spiculate on the surface, with numerous very slender fusiform spicules of very different sizes mixed in the sarcode. The parietes of the cup are pierced with many cylindrical tubes opening on the edge of the cup; but there is no appearance of any spines or oscules on the edge or surface of the dry specimen. The spicules form a coral-like network, very like Macandrewia. Their intersections are rough and tubercular, like the knots of a net, but more rugose; the spicules themselves are generally smooth; but some of them are more or less spinulose, with short acute tubercles. The fusiform spicules in the sarcode are abundant, very slender, slightly tapering and acute at each end; they vary greatly in length, but are always slender and smooth; they are generally straight, but some few are curved like a nearly expanded bow.

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